

# COURSE SYLLABUS

# Kontinuerlig kravhantering och produkthantering

### Continuous Requirements Engineering and Products Management

7,5 ECTS credit points (7,5 högskolepoäng)

Course code: PA2543 Educational level: Second cycle Course level: A1N Field of education: Technology Subject group: Computer Technology

#### 1 Course title and credit points

The course is titled Continuous Requirements Engineering and Products Management/Kontinuerlig kravhantering och produkthantering and awards 7,5 ECTS credits. One credit point (högskolepoäng) corresponds to one credit point in the European Credit Transfer System (ECTS).

#### 2 Decision and approval

This course is established by 2016-02-01. The course syllabus was revised by Head of Department of Software Engineering and applies from 2016-09-01. Regnr: BTH 4.1.1-0545-2015.

#### **3 Objectives**

The objective of the course is to offer a substantial practice in continuous requirements engineering and product management that prepares the students for problems that arises when managing requirements in a changing and cost sensitive reality. The course discusses challenges related to large-scale requirements engineering and market-driven requirements engineering. Areas such as continuous requirements engineering, requirements engineering process improvement, quality requirements, value and technical product management are discussed and related to industry practice.

#### 4 Content

The course consists of six modules: 1. Introduction to continuous requirements engineering and product management 2. Processes, methods, and models for continuous requirements engineering 3. Processes, methods, and models for continuous product management 4. Value based decision-making 5. Non-functional requirements/quality

5. Non-functional requirements/quality requirements

Subject area: Software Engineering Version: 4 Applies from: 2016-09-01 Approved: 2016-03-01 Disused: 2019-12-17

6. Release planning

#### 5 Aims and learning outcomes

Knowledge and understanding

On completion of the course the student will be able to:

• Understand and describe the challenges of continuous requirements engineering and product management

• Understand and describe suitable techniques for continuous requirements engineering *Skills and abilities* 

On completion of the course the student will be able to:

• Apply suitable techniques/methods in a large-scale requirements situation

• Manage a large number of requirements, and a large continuous flow of requirements

• Create a plan for a continuous requirements engineering process for managing requirements in large organizations, from incoming requirements to that the requirements have be released as a part of the product.

Valuation capability and approach

On completion of the course the student will be able to:

• Describe the challenges with, suitable techniques/methods for continuous requirements engineering and product management, and challenges with creating a process for continuous requirements engineering

#### 6 Learning and teaching

The course is divided into several two-weeks sprints. The teaching within a sprint is organized around research articles, book chapters, a set of pre-recorded video lectures, and five assignments. The assignments are constructed in order to help the students to reflect on past experiences, the literature and research articles, and to relate these with each other. During the course, teachers are available via email and discussion forums. The course is taught primarily in English, but teaching in Swedish may occur.

### 7 Assessment and grading *Examination of the course*

Code Module	Credit	Grade
1610 Assignment 1 1620 Assignment 2 1630 Assignment 3 1640 Assignment 4 1650 Assignment 5	1.5 ECTS 1.5 ECTS 1.5 ECTS 1.5 ECTS 1.5 ECTS	G-U G-U G-U G-U G-U

The course will be graded G Pass, UX Fail, supplementation required, U Fail.

#### 8 Course evaluation

The course coordinator is responsible for systematically gathering feedback from the students in course evaluations and making sure that the results of these feed back into the development of the course.

#### 9 Prerequisites

At least 120 credits in a technical subject and a minimum of 2 years professional experience in software development (shown by, for example, a work certificate from an employer).

#### 10 Field of education and subject area

The course is part of the field of education and is included in the subject area Software Engineering.

#### 11 Restrictions regarding degree

The course cannot form part of a degree with another course, the content of which completely or partly corresponds with the contents of this course.

#### 12 Course literature and other teaching material

Research papers and book chapters will be added until the course starts.